

The dearth of February records was not due to lack of coverage. During this month, the Rift Valley was crossed by the writers between Longonot and Mau Summit on four occasions, and a return drive was made from Nakuru to Lake Baringo. D.K. Richards has supplied us with details of three 1978/79 records of his own from northern Tanzania. He observed a single bird at Dodoma Airport on 21 October and two following the plough with Steppe Eagles near Arusha on 27 December. He also picked up a dead bird on the Arusha - Moshi road on 31 October.

IDENTIFICATION

The Lesser Spotted Eagles listed above were distinguished from other *Aquila* species on the basis of flight silhouette and plumage characters. Most were seen together with immature Steppe Eagles, or occurred in areas where Steppe were also present. Flight aspects of a typically marked Lesser Spotted are compared with those of an immature Steppe in the sketches overleaf. As regards flight silhouette, four points of difference were found to be useful in separating the two species.

- (i) Both tend to soar and glide on flat wings, slightly bowed at the carpals, but whereas the primary tips are usually slightly upturned or levelled in Steppe, they are usually drooping in Lesser Spotted (see B1 and B2).
- (ii) The wings of Steppe tend to be angled in fast gliding flight with leading primaries flexed back (see C1); those of Lesser Spotted are usually held straighter.
- (iii) The rear edge of the wing is relatively straight in Lesser Spotted (A2 and C2); in Steppe it is typically curved, and shows a marked bulge in the secondary region (A1 and C1).
- (iv) The tail of Lesser Spotted is rather shorter than that of Steppe and tends to look less wedge shaped.

It is difficult to appreciate the smaller size of Lesser Spotted without other species for comparison. However, seen *together* with Steppe at Nakuru and Elementeita, Lesser Spotted were clearly about 10 - 15% less in wingspan.

The plumage of the 1978/79 Lesser Spotted was highly variable, both as regards the extent of paler feathering on the upperparts, and the amount of white marking on the wings and rump. The underbody was generally dark brown, apart from a whitish area under the tail. Some birds showed an inconspicuous broken pale line below at the base of the flight feathers, but the underwing was usually completely dark, with the flight feathers as dark as, or slightly darker than, the underwing coverts. The upper body and head were in some cases entirely dark brown, but a well defined yellowish patch was often visible at the nape. The upper wing coverts were usually paler, contrasting with the dark underparts in flight, and in some birds the entire crown and upper neck, as well as the mantle, were pale buffish brown.

Most birds had prominent white patches on the upperwing at the base of the inner primaries, and a narrow line along the edge of the

greater coverts. In some, however, upper wing markings were reduced to a few pale shaft streaks on the primary bases. Most birds showed a prominent U-shaped white rump patch. In some cases this was reduced in width, buffish rather than white, or absent altogether. A small white patch in the centre of the back was almost always noted.

Two rows of white spots were present on the upper wing coverts of the Baringo bird and two of the birds at Nakuru in December. These were otherwise dark, but with prominent white markings on wing and rump, and were tentatively assumed to have been in their first year. The great majority of birds showed no wing spots. Lighter coloration of the upperparts and reduction of white markings have both been given as characteristics of older birds (Porter et al. 1976). It was therefore intriguing to note that some of the lighter Kenya individuals had very marked wing and rump patches, whereas in some dark birds these were practically absent.

Plumage features used in distinguishing Lesser Spotted Eagles from immature Steppe Eagles were:

- (i) The darker underside, particularly when in combination with lighter upperparts and forewing.
- (ii) The combination of much white on the rump and upperwing, but little or none on the underwing. (Steppe Eagles with white rump and upperwing markings show broad white lines below the wing, along the border of the coverts and along the trailing edge.)
- (iii) The U-shaped, rather narrow white rump, as opposed to the whitish bar usual in the Steppe Eagle.

We did not personally record any adult Steppe Eagles together with Lesser Spotted. These would have been distinguishable, however, on silhouette, and also by lack of white markings above, and by dark (blackish brown) upperparts as well as underparts. The Rift Valley Lesser Spotted were seen in the company of an occasional Tawny Eagle. Although similar in size, the latter were readily distinguished by their paler underparts, their broad buffish rump (young birds) and their flight silhouette - similar to that of Steppe Eagle.

Nostril shape has been given as a character useful in separating Spotted from Tawny/Steppe Eagles (e.g. McLachlan & Liversidge 1978). In the few Rift Valley birds seen perched at a range of less than 30 m, the nostril was usually best described as kidney-shaped. At rather longer range, where visible, it appeared open rather than slit-like.

The difficulty of separating Lesser Spotted Eagles from Greater Spotted Eagles *A. clanga* has been emphasised and discussed by Porter et al. (1976) and by Svensson (1975). Many of the criteria used to separate the 1978/79 birds from Tawny/Steppe Eagles would apply equally to Lesser Spotted and Greater Spotted Eagles. However, all the birds seen singly, and most of those in the winter parties, were either generally mid to pale brown on much of the upperparts, or showed at least pale nape patches and were therefore identified with confidence as Lesser Spotted. Nevertheless, the possible presence of the odd

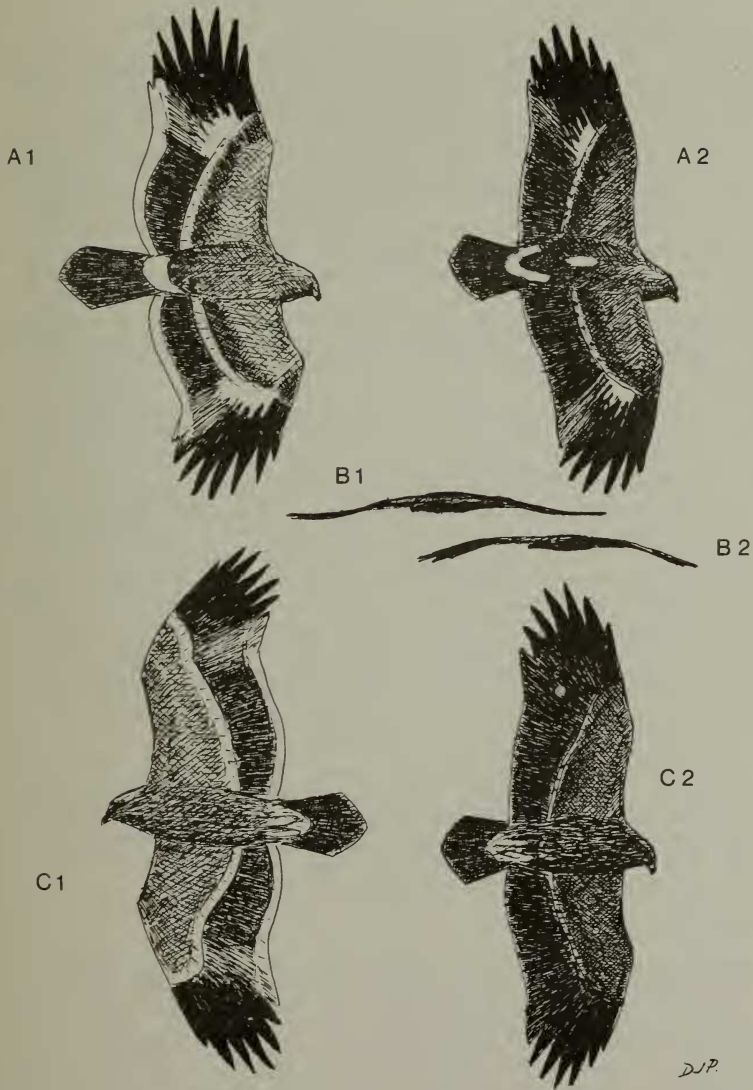


Fig.1 Flight aspects of a typically marked (presumed immature) Lesser Spotted Eagle (A2, B2, C2) compared with immature Steppe Eagle (A1, B1, C1)

Greater Spotted amongst darker individuals in the Rift Valley parties cannot be discounted.

DISCUSSION

The pattern of occurrence of the Lesser Spotted Eagle in Kenya during the past seven years seems to reflect the status established for the Steppe Eagle, i.e. a relatively widespread passage from October to December and more local wintering concentrated particularly in the Rift Valley highlands (B.S.M. unpublished). Numbers of Lesser Spotted actually seen from the ground during passage are probably related to weather conditions, for several recent November records have been after heavy rain. The great majority of Steppe Eagles migrating to southern Africa would appear to pass through Kenya, for the species is scarce over most of Uganda. Lesser Spotted, which also winter commonly in the southern tropics, must clearly overfly most of East Africa in autumn, but whether passage is concentrated to the east or west of Lake Victoria is not known. Recent observations have revealed a regular spring passage through Rwanda where as many as 130 birds a year have been recorded moving northwards during March (Vande Weghe 1978). Small parties have also been noted in spring in Ruwenzori National Park, southwest Uganda (M.P.L. Fogden, pers. comm.). There are four October-November Rwanda sightings involving one to two birds each, but autumn records from Uganda are lacking.

The winter records of Lesser Spotted Eagle from the Kenyan Rift Valley have been from the open plains and farmland frequented also by Steppe Eagles. However, although the two species have been recorded together, and even seen feeding at the same carrion, a slight difference in habitat preference has been evident. Lesser Spotted have been confined mainly to the vicinity of water, particularly Lakes Nakuru and Ol Bolossat, and were notably absent during 1978/79 from drier grassland localities where Steppe Eagles were common. At Elementeita, on 14 January 1979, it was noted that the 20 Lesser Spotted kept together in a distinct flock, and did not associate with a party of c. 30 Steppe Eagles about a kilometre away.

Wintering numbers of Steppe Eagles vary considerably in Kenya from year to year. Similar fluctuation may prove to apply in the case of the smaller numbers of Lesser Spotted. The unusual numbers of Lesser Spotted recorded early in 1979 may have been associated with the much wetter than average conditions at this time, and the fact that the rains had apparently failed in southern Africa.

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